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OYEN, WIGGS, GREEN & MUTALA 480 - THE STATION 601 WEST CORDOVA STREET VANCOUVER, BC V6B 1G1 CANADA			PECHHOLD, ALEXANDRA K	
			ART UNIT	PAPER NUMBER
			3671	
DATE MAILED: 02/01/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/000,448	WILEY, PATRICK CARL
	Examiner	Art Unit
	Alexandra K Pechhold	3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 8/13/04.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) _____ is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-24 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>filed 8/13/04</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1, 2, 8-12, 14, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over “Cata-Groove: Snow Plow Resistant Thermoplastic Marking Material” (July 1998) in view of Stowell et al (US 5,215,402).**

Regarding claim 1, Cata-Groove discloses a method wherein grooves are “installed by sawing or grinding into the finished pavement surfaces to the dimensions and shapes specified” (page 2 of 5, Section 3.1.2). After this step of groove installation, the method in Cata-Groove comprises application of a thermoplastic road marking compound into the grooves that have been formed in the pavement surface to provide a pavement marking that will provide superior durability in those traffic areas that are exposed to excessive snow plowing (page 1 of 5, section 1), thereby disclosing applicant's steps (d), (e), and (f). Cata-Groove fails to disclose applicant's steps: (a) providing a first template, (b) impressing the first template into the asphalt surface when the asphalt is in a pliable state to form an impression, and (c) removing the first template from the asphalt surface to expose the impression.

Stowell teaches imprinting a predefined pattern in freshly rolled asphalt surface with a pliable, grid-like template and then lifting the template to allow the asphalt to harden with a pattern thereon (see abstract and Fig. 2), thereby teaching applicant's method steps (a), (b), and (c). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the steps of sawing or grinding to create the shapes and dimensions in Cata-Groove with the steps of providing a first template having a predetermined pattern, impressing the first template into the asphalt surface when the asphalt is pliable, and removing the first template to expose an impression, as taught by Stowell, since Stowell states in column 1, lines 15-62 that prior art methods and apparatus for imprinting surface patterns are known but have disadvantages unlike the method of imprinting freshly rolled asphalt surfaces with a template to simulate the aesthetically pleasing features of cobblestones, interlocking paving stones, and the like.

Regarding claim 2, Stowell discloses positioning grid (10) on a freshly roller asphalt surface (12) while it is still hot and pliable (Col 2, lines 64-66).

Regarding claim 8, Cata-Groove discloses in section 3.3.2 that retroreflective glass spheres are dispensed immediately behind the thermoplastic application device. By the nature that they are retroreflective, their color will contrast with the color of the asphalt.

Regarding claim 9, Cata-Groove discloses in section 3.3.2 that retroreflective glass spheres are dispensed immediately behind the thermoplastic application device.

Being retroreflective, the beads can be viewed as a light source for illuminating the template.

Regarding claims 10 and 11, Cata-Groove discloses in section 3.3.2 that retroreflective glass spheres are dispensed immediately behind the thermoplastic application device. Being retroreflective, the beads can be viewed as luminescent or fluorescent.

Regarding claim 12, Cata-Groove discloses in section 3.4 (page 3 of 5) that the top of the line will protrude at least 30 mils above the top plane of the pavement surface, which meets the claimed recitation of “*substantially flush* with the surface of the asphalt when the second template is fixed in position.”

Regarding claim 14, Cata-Groove discloses in section 3.4 (page 3 of 5) that the top of the line will protrude at least 30 mils above the top plane of the pavement surface, which meets the claimed recitation of “the upper surface projects above the surface of the asphalt when the second template is fixed in position.”

Regarding claim 16, Cata-Groove fails to disclose the frame elements having a width between $\frac{1}{4}$ inch and 1 inch. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the size of the markings in Cata-Groove to be between $\frac{1}{4}$ inch and 1 inch, since if smaller road markings were desired for a particular application, the grooves and finished markings would therefore have to be smaller, and it has also been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding claim 17, Cata-Groove discloses that the predetermined pattern can be decorative in Section 3.4 in disclosing that words or symbols can be formed.

Regarding claim 18, Cata-Groove discloses that the predetermined pattern can be non-linear in Section 3.4 in disclosing that words or symbols can be formed.

3. Claims 3-5 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over “Cata-Groove” (July 1998) and Stowell et al (US 5,215,402) as applied to claim 1 above, and further in view of Hughes (EP 0898018 A1).

Regarding claim 3, the combination of Cata-Groove and Stowell fails to disclose heating the second template after insertion of the second template into the impression. Hughes teaches applying locally applied heat so to allow the pattern to be imprinted (Col 2, lines 2-5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method in Cata-Groove with the steps in Stowell to include heating the second template after insertion of the second template into the impression, as taught by Hughes, since Hughes states in column 2, lines 2-5 that locally applied heat after laying of the pattern allows the pattern to be imprinted.

Regarding claims 4 and 5, the teaching of Hughes fails to specifically disclose the temperature. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the heating temperature of Hughes to be within the range of approximately 100-400 degrees Fahrenheit, or 150-350 degrees Fahrenheit, since Hughes discloses heating, and where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding claim 19, Hughes' teaching of applying locally applied heat so to allow the pattern to be imprinted (Col 2, lines 2-5) contemplates a locally applied heater as recited.

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Cata-Groove" (July 1998) and Stowell et al (US 5,215,402) as applied to claim 1 above, and further in view of Kawasaki (US 4,889,666). The combination of Cata-Groove and Stowell fails to disclose the upper surface of the second template recessed below the surface of the asphalt when the second template is fixed in position. Kawasaki teaches a method for producing concrete products provided with inlaid patterns, with the final step of grinding the surface of the block to remove excess ornamenting or coloring material from the surface of the block to thereby produce a finished product with an inlaid pattern on the surface (see English abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method in Cata-Groove with the steps in Stowell to include the upper surface of the second template recessed below the surface of the asphalt when the second template is fixed in position as taught by Kawasaki, since Kawasaki states that the final step of grinding the surface removes excess ornamenting or coloring material from the surface of the block to thereby produce a finished product with an inlaid pattern on the surface.

5. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Cata-Groove" (July 1998) and Stowell et al (US 5,215,402) in view of Hughes (EP 0898018 A1).

Regarding claim 20, Cata-Groove discloses applicant's steps (d) and (e) as discussed with regards to claim 1 above. Furthermore, the second template of Cata-Groove can be considered "pre-formed in a predetermined pattern", since it is pre-formed by mixing the components of the material before application, and the pattern has already been predetermined by the lines that were ground into the surface. Cata-Groove fails to disclose applicant's steps: (a) providing a first template, (b) impressing the first template into the asphalt surface when the asphalt is in a pliable state to form an impression, and (c) removing the first template from the asphalt surface to expose the impression, and (f) fixing the second template in position within said impression to form said inlaid pattern by using a portable heater in proximity to said second template.

With respect to steps (a), (b), and (c), Stowell teaches imprinting a predefined pattern in freshly rolled asphalt surface with a pliable, grid-like template and then lifting the template to allow the asphalt to harden with a pattern thereon (see abstract and Fig. 2), thereby teaching applicant's method steps (a), (b), and (c). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the steps of sawing or grinding to create the shapes and dimensions in Cata-Groove with the steps of providing a first template having a predetermined pattern, impressing the first template into the asphalt surface when the asphalt is pliable, and removing the first template to expose an impression, as taught by Stowell, since Stowell states in column 1, lines 15-62 that prior art methods and apparatus for imprinting surface patterns are known but have disadvantages unlike the method of imprinting

freshly rolled asphalt surfaces with a template to simulate the aesthetically pleasing features of cobblestones, interlocking paving stones, and the like.

With respect to step (f), Cata-Groove fails to disclose using a portable heater in proximity to the second template to fix the template in position. Hughes teaches applying locally applied heat so to allow the pattern to be imprinted (Col 2, lines 2-5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method in Cata-Groove to include using a portable heater in proximity to the second template to fix the template in position as taught by Hughes, since Hughes states in column 2, lines 2-5 that locally applied heat after laying of the pattern allows the pattern to be imprinted.

Regarding claim 21, once the material of Cata-Groove is poured in the grooves, it can be viewed as comprising a unitary grid of frame elements, depending on the shape of the application.

Regarding claim 22, Cata-Groove discloses a range of widths of each said frame element in section 3.4. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the size of each frame element of Cata-Groove to be between approximately 0.25 and 2.0 inches in width, since Cata-Groove discloses a variety of widths, which depend on the groove size and application, and it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

6. Claims 1, 2, and 6-16 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Caven et al (US 5,857,453) or Eigenmann (US 4,685,824) in view of Stowell et al (US 5,215,402).

Regarding claim 1, Caven discloses a method comprising grooving the pavement and discusses applying StamarkTM tape made by 3M Corporation into the grooves (see Col 1, lines 24-67), thereby disclosing applicant's steps (d), (e), and (f). Note that although Caven's invention is directed towards a slot cutting machine, Caven discusses the use of StamarkTM tape in the "Background of the Invention". Similarly, Eigenmann discloses filling grooves in pavement with a marking or signaling tape (see Col 3, lines 59-68). Caven and Eigenmann fail to disclose applicant's steps: (a) providing a first template, (b) impressing the first template into the asphalt surface when the asphalt is in a pliable state to form an impression, and (c) removing the first template from the asphalt surface to expose the impression.

Stowell teaches imprinting a predefined pattern in freshly rolled asphalt surface with a pliable, grid-like template and then lifting the template to allow the asphalt to harden with a pattern thereon (see abstract and Fig. 2), thereby teaching applicant's method steps (a), (b), and (c). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the grooving step in Caven or Eigenmann with the steps of providing a first template having a predetermined pattern, impressing the first template into the asphalt surface when the asphalt is pliable, and removing the first template to expose an impression, as taught by Stowell, since Stowell states in column 1, lines 15-62 that prior art methods and apparatus for imprinting

surface patterns are known but have disadvantages unlike the method of imprinting freshly rolled asphalt surfaces with a template to simulate the aesthetically pleasing features of cobblestones, interlocking paving stones, and the like.

Regarding claim 2, Stowell discloses positioning grid (10) on a freshly roller asphalt surface (12) while it is still hot and pliable (Col 2, lines 64-66).

Regarding claim 6, Caven and Eigenmann disclose a thermoplastic grid formed prior to insertion into the impression, seen as the tape, since it is pre-formed and pre-shaped to the size of the desired application in the grooves before it is inserted therein.

Regarding claim 7, the tape in Caven or Eigenmann is of a unitary construction, since each piece of tape is a unitary piece.

Regarding claim 8, Caven discusses how the tape is used to replace painted pavement stripes (Col 1, lines 24-39), and so considering the use on the roadways, the tape will also be colored to contrast with the asphalt. Eigenmann also states in the Abstract that the tape has retroreflective elements, thereby contrasting with the color of the asphalt.

Regarding claims 9, 10, and 11, Eigenmann discloses the tape (2) as having retroreflective globules (3) (Col 2, line 62), which provide a light source upon their reflecting light back, and can be luminescent or fluorescent by their nature of reflectivity.

Regarding claims 12 and 13, Caven discloses in column 1, lines 24-67 how putting the tape into shallow grooves prevents snow plows from damaging them. Therefore, the tape can be considered as being "substantially flush with the surface of the asphalt" as well as "recessed below the surface of said asphalt", since the tape is

very close to being flush with the surface when it is slightly recessed in the groove just below the surface.

Regarding claim 14, Eigenmann discloses tape (2) with rails (4) seen in Fig. 1, the rails (4) slightly projecting above the surface of the asphalt, in order to provide an anti-skid element (see Abstract).

Regarding claims 15 and 16, Caven discloses specialized striping tapes, which have to be pre-formed from tape elements prior to insertion in the pavement, since the desired size and shape for the application is known. Eigenmann also discloses that the tape is prefabricated (Col 3, line 6). Both references fail to disclose any width. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the width of the tape in Caven or Eigenmann to be less than 12 inches or be between $\frac{1}{4}$ inch and 2 inches, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art (*In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)), and it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

7. Claims 3-5 and 19 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Caven et al (US 5,857,453) or Eigenmann (US 4,685,824) and Stowell et al (US 5,215,402) as applied to claim 1 above, and further in view of Hughes (EP 0898018 A1).

Regarding claim 3, the combination of Caven or Eigenmann and Stowell fails to disclose heating the second template after insertion of the second template into the

impression. Hughes teaches applying locally applied heat so to allow the pattern to be imprinted (Col 2, lines 2-5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method in Caven or Eigenmann with the steps in Stowell to include heating the second template after insertion of the second template into the impression as taught by Hughes, since Hughes states in column 2, lines 2-5 that locally applied heat after laying of the pattern allows the pattern to be imprinted.

Regarding claims 4 and 5, the teaching of Hughes fails to specifically disclose the temperature. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the heating temperature of Hughes to be within the range of approximately 100-400 degrees Fahrenheit, or 150-350 degrees Fahrenheit, since Hughes discloses heating, and where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding claim 19, Hughes' teaching of applying locally applied heat so to allow the pattern to be imprinted (Col 2, lines 2-5) contemplates a locally applied heater as recited.

8. Claims 17 and 18 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Caven et al (US 5,857,453) or Eigenmann (US 4,685,824) and Stowell et al (US 5,215,402) as applied to claim 1 above, and further in view of J.H. Walker et al (US 2,898,825). The combination of Caven or Eigenmann and Stowell fails to disclose the predetermined pattern as being decorative or non-linear. Walker

teaches a method of applying stripes of tape on paved surfaces for the purpose of marking off lanes and areas, disclosing that it is understood that many variations in the structure, design, and arrangement of the various elements of the stripe application apparatus will occur to one skilled in the art (Col 4, lines 33-36). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Caven or Eigenmann so that the predetermined pattern is decorative or non-linear as taught by Walker, since Walker discloses a similar taping method as Caven and Eigenmann and states in column 4, lines 33-36 that it is understood that many variations in the structure, design, and arrangement of the various elements of the stripe application apparatus will occur to one skilled in the art, and altering the pattern to be decorative or non-linear falls within such a variation of structure, design, or arrangement.

9. Claims 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caven et al (US 5,857,453) or Eigenmann (US 4,685,824) and Stowell et al (US 5,215,402) in view of Hughes (EP 0898018 A1).

Regarding claim 20, Caven discloses a method comprising grooving the pavement and then applying StamarkTM tape made by 3M Corporation into the grooves (see Col 1, lines 24-67), thereby disclosing applicant's steps (d) and (e), since the tape is pre-formed in a predetermined pattern according to the desired application that matches the shape of the grooves. Similarly, Eigenmann discloses filling grooves in pavement with a marking or signaling tape (see Col 3, lines 59-68). Caven and Eigenmann fail to disclose applicant's steps: (a) providing a first template having a

predetermined pattern, (b) impressing the first template into the asphalt surface when the asphalt is in a pliable state to form an impression, (c) removing the first template from the asphalt surface to expose the impression, and (f) fixing the second template in position by using a portable heater.

Stowell teaches imprinting a predefined pattern in freshly rolled asphalt surface with a pliable, grid-like template in a predetermined pattern and then lifting the template to allow the asphalt to harden with a pattern thereon (see abstract and Fig. 2), thereby teaching applicant's method steps (a), (b), and (c). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the grooving step in Caven or Eigenmann with the steps of providing a first template having a predetermined pattern, impressing the first template into the asphalt surface when the asphalt is pliable, and removing the first template to expose an impression, as taught by Stowell, since Stowell states in column 1, lines 15-62 that prior art methods and apparatus for imprinting surface patterns are known but have disadvantages unlike the method of imprinting freshly rolled asphalt surfaces with a template to simulate the aesthetically pleasing features of cobblestones, interlocking paving stones, and the like.

With respect to step (f), the combination of Caven and Eigenmann fails to disclose using a portable heater in proximity to the second template to fix the template in position. Hughes teaches applying locally applied heat so to allow the pattern to be imprinted (Col 2, lines 2-5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Caven or Eigenmann to include using a portable heater in proximity to the second template to fix the template

in position as taught by Hughes, since Hughes states in column 2, lines 2-5 that locally applied heat after laying of the pattern allows the pattern to be imprinted.

Regarding claim 21, the preformed tape in Caven and Eigenmann comprises a unity grid of frame elements, which can be seen as the individual shapes or pieces of preformed tape that are placed in the grooves.

Regarding claim 22, Caven and Eigenmann fail to disclose a range of widths of each said frame element of the tape pieces. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the size of each frame element, seen as each tape pieces, to be between approximately 0.25 and 2.0 inches in width, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding claim 23, the combination of Caven and Eigenmann fails to disclose the step of pre-heating the asphalt surface after forming the impression. Hughes teaches pre-heating the asphalt surface prior to imprinting a pattern thereon, which Hughes discloses in column 2, lines 1-5 in disclosing that the material is laid hot and then imprinted with a pattern before cooling. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Caven or Eigenmann to include pre-heating the asphalt prior to impressing as taught by Hughes, since Hughes states in column 1, lines 1-5 that heated asphalt can then be imprinted before it cools, since it will more readily receive the imprint while still hot.

Regarding claim 24, the combination of Caven and Eigenmann fails to disclose the step of pre-heating the asphalt surface by using a portable heater prior to the impressing step. Hughes teaches pre-heating the asphalt surface in column 2, lines 13-16, since heating the surface of the material softens it for moulding purposes. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Caven or Eigenmann to include pre-heating the asphalt prior to impressing as taught by Hughes, since Hughes states in column 2, lines 13-16 that heating the surface of the material softens it for moulding purposes.

Response to Arguments

10. Applicant's arguments filed 8/13/04 with respect to the Cata-Groove and Stowell references have been fully considered but they are not persuasive.

Applicant argues that the Cata-Groove process is a "very time consuming procedure", in terms of the groove-making process using a grinder being very labor intensive and slow. Although this may be true, it is irrelevant to the claim at issue, since the Cata-Groove reference is being used for its disclosure of steps (d), (e), and (f), which include providing a second template, inserting that template, and fixing it to form an inlaid pattern. Cata-Groove's use of a grinder to form the initial grooves is beyond the scope of the issue here, since Cata-Groove is being used for its disclosure of applying a thermoplastic road-marking compound into the grooves.

Applicant also argues that the Cata-Groove's material that is poured into the grooves is molten and free-flowing and therefore does not meet the limitation of a

"predetermined pattern". The Examiner maintains the rejection using Cata-Groove, since there is indeed a predetermined pattern. The grooves in Cata-Groove are grinded in a predetermined pattern, so that when the material is poured in the grooves, it fits that predetermined pattern. The material is not simply poured haphazardly, but is poured into the preformed pattern.

Applicant also argues that there is no motivation to combine Cata-Groove with Stowell since Stowell advocates spreading a colored concrete slurry on the impressed asphalt to achieve a brick and mortar or simulated cobblestone effect, whereas Cata-Groove uses white or yellow colors to serve as a pavement marking. Such color choices are irrelevant to the claim at issue, and are tangential to the motivation to combine, which the Examiner sets out in claim 1.

With respect to the claim rejections using the "3M Guidelines for Pavement Marking Applications in Grooved Pavement Surfaces: Information Folder 5.18 Grooving Applications", the Information Folder cited material back that originally came from a Tech Memo dated March 2000. The Examiner has been unable to produce that Tech Memo of March 2000, so therefore the 3M document date falls after the applicant's December 4, 2001 filling date of this application. In light of this, the Examiner has found a prior art reference (US 5,857,453 to Caven et al) that teaches the StamarkTM technology, which is now being used in place of the 3M Memo, along with the Eigenmann reference (US 4,685,824) which teaches a similar technology of applying tape into grooves in pavement.

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Regarding claims 9, 10, and 11, applicant argues that retroreflective glass spheres of Cata-Groove do not meet the limitation of "a light source for illuminating said second template after said template is fixed in position within said impression" (claim 9) and "wherein said second template is luminescent" (claim 10). The Examiner maintains the rejection, since the retroreflective glass spheres can be considered a source of light, since once light is received therein, they project that light outwards, thereby being a source upon receipt of the light. Thus, the retroreflection can be viewed as luminescent or fluorescent, depending on how much light is reflected.

Regarding claims 12 and 14, indeed Cata-Groove discloses in section 3.4 (page 3 of 5) that the top of the line will protrude at least 30 mils above the top plane of the pavement surface. Applicant uses broad language in claim 12 by reciting that "said upper surface is substantially flush with the surface of the asphalt". By reciting "substantially flush", the applicant is allowing some room for deviation from being exactly flush. Therefore, a 30 mils difference meets the claimed recitation of "substantially flush". In claim 14, applicant recites that the "upper surface projects above the surface of said asphalt", and indeed, technically the material of Cata-Groove does project (by at least 30mils) above the asphalt surface. Therefore, the Examiner maintains the rejection of both claims 12 and 14.

The applicant also disagrees with the rejection of claim 13 using the teaching of Kawasaki (US 4,889,666) for the limitation of the upper surface of the second template recessed below the surface of the asphalt when the second template is fixed in position. The Examiner relies on the motivation to combine found in Kawasaki, in that Kawasaki

Art Unit: 3671

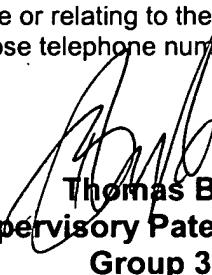
states that the final step of grinding the surface removes excess ornamenting or coloring material from the surface of the block to thereby produce a finished product with an inlaid pattern on the surface. This is relevant to the disclosure of Cata-Groove, since the material poured into the grooves in Cata-Groove includes pigments in the mixture. Therefore, one of ordinary skill in the art may desire affect the coloring of the material in the grooves of Cata-Groove by grinding the surface thereof to alter the coloring material, its consistency, or effect as taught by Kawasaki.

Applicant's arguments with respect to claims 3-5 have been considered but are moot in view of the new grounds of rejection. The applicant has amended claim 3 to require the heating of the second template to take place "after insertion of said second template into said impression". Therefore, the Examiner is now using the teaching of Hughes (EP 0898018 A1) for the teaching of heat application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexandra Pechhold whose telephone number is (703) 305-0870. The examiner can normally be reached on Mon-Thurs. from 8:00am to 5:30pm and alternating Fridays from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (703)308-3870. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.



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